

Appl. No. 10/634,458  
Amdt. Dated March 20, 2006  
Reply to Office Action of September 19, 2005

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Claim 1-15 (Cancelled).**

**Claim 16 (Currently Amended):** A system for the supply of elevated pressure and temperature fluid to a process system, said system comprising:

a pressurized fluid delivery system including a process fluid supply system and pump for supplying a process fluid at a pressure of at least a process pressure, and a process fluid heater for heating said process fluid to a process fluid mixing temperature;

a pressurized additives delivery system including an additives supply system and pump for supplying additives at a pressure of at least said process pressure, and an additives heater for heating said additives to a additive mixing temperature suitable for mixing with said process fluid;

a directional valve, disposed between said process fluids heater, said additive heater and the process system, said process fluid heater, said additives heater, said directional valve being controlled by a computer control system; and

said pressurized fluid delivery system and said pressurized additives delivery system being connected to said directional valve such that a computer controlled ratio of process fluids and additives can be admitted through said mixing directional valve.

**Claim 17 (Currently Amended):** The system according to claim 16 further comprising a mixer, said mixer being disposed between said mixing directional valve and the process system.

**Claim 18 (Original):** The system according to claim 17 wherein said mixer is chosen from the group of mixers consisting of static and dynamic mixers.

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Claim 19 (Original): The system according to claim 17 further comprising:  
a mixture heater;  
said mixture heater being disposed between said mixer and the process system; and  
said mixture heater heating said mixture to at least a process temperature.

Claim 20 (Original): The system according to claim 19 wherein said process temperature induces a phase change in at least said process fluid from a liquid phase to a supercritical phase.

Claim 21 (Original): The system according to claim 17 further comprising a shunt disposed between said mixer and the process system, for selectively diverting said process fluid and additives from the process system.

Claim 22 (Original): The system according to claim 16 wherein said process fluid mixing temperature is at least equal to a process temperature.

Claim 23 (Original): The system according to claim 16 wherein said process fluid mixing temperature induces a phase change in said process fluid from a liquid phase to a supercritical phase.

Claim 24-26 (Cancelled).